

Insect Food of the Rock Wren

The rock wren, *Salpinctes obsoletus obsoletus* (Say), is a common and sometimes abundant denizen of many rocky local semi-desert areas frequented by the sugar-beet leafhopper, *Eutettix tenellus* (Baker), the false chinch bug, *Nysius ericae* (Sch.), Say's plant bug, *Chlorochroa sayi* Stal, army cutworm, various grasshoppers, *Chorizagrotis auxiliaris* (Grote), and certain other insects which move from range land to attack agricultural crops in the cultivated areas. During a season of unusual beet leafhopper abundance, as many as 59 *E. tenellus* have been found in the stomach of a rock wren collected near Timpie, Tooele County, Utah on October 6, 1934. Fifty-three adult and 11 nymphal *Nysius ericae* were present in the stomach of a specimen taken at Timpie on September 11, 1937, besides 16 *E. tenellus*, 2 mirids, *Lygus hesperus* Knt., 1 Coleoptera larva, 2 ants and 1 Lepidoptera larva. In 1940, with grasshoppers abundant, 22 of the 26 stomachs collected contained 51 grasshoppers, mostly adults. One stomach held 658 winged ants, besides parts of 1 grasshopper, an aphid, 1 beetle, 1 scutellerid bug and a beet leafhopper.

The total recognizable insect contents in the 88 stomachs examined, collected throughout Utah from 1935 through 1941, consisted of: 1 Thysanura; 10 Collembola; 104 Orthoptera, 92 being adult and 3 nymphal grasshoppers, among them being recognized *Melanoplus mexicanus* Sauss., *Camilla pellucida* (Scudder), *Chorthippus curtipennis* (Harris), *Trachyrhachis kiowa* (Thos.) and *Trimerotropus* spp.; 4 Isoptera; 3 Odonata, dragonflies; 5 Neuroptera included larval ant lions and 1 Raphidiidae; 11 Trichoptera; 418 Hemiptera, 268 adult and 51 nymphal *Nysius ericae*, besides 5 *Geocoris decoratus* Uhl, 1 Scutelleridae, *Homocidus acnifrons* (Say), 48 Pentatomidae which included *Chlorochroa sayi*, *C. uhleri* Stal, *C. ligata* (Say) and *Thyanta custator* (Fabr.), 8 Miridae, 3 being *Lygus hesperus* and 1 *L. elisus* Van D. being recognized, 1 Anthocoridae, *Orius tristicolor* (Wh.), 1 Nabidae, *Nabis alternatus* Parsh; of 776 Homoptera, 326 were leafhoppers, 166 being adult and 152 nymphal *Eutettix tenellus*, with *Aceratigallia sanguinolenta* (Prov.) and *Dikraneura* sp. also represented; 1 Fulgoridae; 417 Aphididae, recognized among them being *Cinara sibericae* (G.-P), 12 *Macrosiphum escalantii* Kult., 2 *M. coweni* (Hunter), *Aphis carbocolor* Gill., *A. bonnevillensis* Kult., and *A. medicaginis* Koch; 8 Coccidae; 3 of the 106 Coleoptera found were larvae; the rest included 1 Carabidae, 6 Chrysomelidae (4 being flea beetles), 1 Buprestidae, 1 Scarabaeidae, and 2 Melyridae, *Collops bipunctatus* Say; 43 Lepidoptera, 17 being larvae, and in addition there were 45 lepidopterous eggs; 29 Diptera, one a *Pipunculus* sp. larva protruding from a beet leafhopper abdomen, besides 4 Culicidae, 4 Tipulidae, 1 Chironomidae, 1 Syrphidae, 1 Calliphoridae and 2 Tabanidae, 1 a *Chrysops fulvaster* O. S.; 1,171 Hymenoptera, 1,097 being ants including many *Pogonomyrmex occidentalis* (Cresson), 1 Braconidae and 1 wild bee. There also were found 51 miscellaneous insect eggs, 5 spiders, 1 large red mite, 1 Solpugida, and 30 seeds (mostly from weeds). A number of the stomachs held plant fragments, besides some extra grasshopper mandibles which may have been used as grit.

Because of its feeding so extensively upon injurious species of insects, the rock wren should be considered a beneficial and desirable inhabitant of the western range and farm lands.—George F. Knowlton and F. C. Harmston, Utah Agricultural Experiment Station, Logan.